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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,739

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Abhishek Chauhan

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03/17/2008

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TWO INTERNATIONAL PLACE  
BOSTON, MA 02110

EXAMINER

LANIER, BENJAMIN E

ART UNIT

PAPER NUMBER

2132

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/782,739	<b>Applicant(s)</b> CHAUHAN ET AL.	
	<b>Examiner</b> BENJAMIN E. LANIER	<b>Art Unit</b> 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-32 and 35-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-32 and 35-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed 04 January 2008 amends claims 1, 17, and 32. Claims 2, 3, 33, and 34 have been cancelled. Applicant's amendment has been fully considered and entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 4-6, 16-21, 31, 32, 35-37, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie, U.S. Patent No. 6,772,347, in view of Chelsa, U.S. Publication No. 2004/0250124. Referring to claims 1, 17, 32, Xie discloses a computer network firewall wherein initially denied packets are additionally filtered dynamically (Col. 5, lines 45-50 & Figure 6),

which meets the limitation of receiving a first message, rejecting the first message based on a rejection rule, determining, for the first message, an attribute that triggered the rejection rule. The dynamic filter, filters the initially denied packets using an additional set of rules, which are dynamically generated (Col. 5, lines 50-52), which meets the limitation of generating an exception rule to the rejection rule which rejected the messages with the attribute. The initially rejected packets, and later packets, can be allowed based on the newly generated rules used by the dynamic filter (Col. 5, lines 63-66), which meets the limitation of receiving a second message having the attribute, and allowing the second message, responsive to the exception rule. Xie does not disclose dynamically generated rules when it is determined that packet denial is greater than a desired threshold amount. Chelsa discloses maintaining a frequency for the number of occurrences with which messages were rejected ([0017]), which meets the limitation of incrementing, for the attribute, a count of the number of messages rejected based on the attribute, based on the count for the attribute, determining a frequency with which messages having the attribute were rejected based on the rejection rule. It would have been obvious to one of ordinary skill in the art to dynamically generate exceptions for the dynamic filter of Xie based on a desired amount of allowable packets in order to minimize the blocking of legitimate traffic as taught be Chelsa ([0017]).

Referring to claims 4, 19, 35, Xie discloses that the dynamic filter generates rules using criteria such as port number and IP address, which are extracted from incoming packets (Col. 5, lines 52-55), which meets the limitations of the attribute is one of a message component, a value.

Referring to claims 5, 6, 20, 21, 36, 37, Xie discloses that the packets are initially denied based on counter rules that increment the count until a threshold is exceeded (Col. 5, lines 10-

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15), which meets the limitation of the frequency is a weighted/direct count of occurrences of the attribute.

Referring to claims 16, 31, 44, Xie discloses that the packets are initially denied based on counter rules that increment the count until a threshold is exceeded (Col. 5, lines 10-15). The dynamic filter, filters the initially denied packets using an additional set of rules, which are dynamically generated (Col. 5, lines 50-52). Xie does not disclose dynamically generated rules when it is determined that packet denial is greater than a desired threshold amount. It would have been obvious to one of ordinary skill in the art to dynamically generate exceptions for the dynamic filter of Xie based on a desired amount of allowable packets in order to minimize the blocking of legitimate traffic as taught by Chelsa ([0017]).

6. Claims 7-15, 22-30, 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie, U.S. Patent No. 6,772,347, in view of Chelsa, U.S. Publication No. 2004/0250124, and further in view of Balasubramanian, U.S. Publication No. 2005/0086206. Referring to claims 7, 8, 12, 13, 22, 26, 27, 30, 38, 39, 41, 42, Xie discloses filtering packets using rules based on port number and IP address (Col. 5, lines 58-60). The rules can be stored in a memory (Col. 4, lines 5-8), which meets the limitation of a trie structure, wherein each node in the trie is associated with a component. Xie does not specify filtering based on URLs and URL descendants.

Balasubramanian discloses a rule based filtering system where URL requests are filtered at the domain and IP address level, based on rules, to allow/deny traffic for all domains beginning with identified IP address information ([0056] & [0065]-[0067]), which meets the limitation of maintaining a frequency for each instance of a URL component, wherein the frequency is a function of a number of occurrences with which a URL component and its descendants were

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rejected by a rule, selecting a URL component according to a set of constraints, and generating an exception rule for the selected URL component and its descendants, the exception rule is generated by inferencing a scalar data type of the descendants of the selected URL component. It would have been obvious to one of ordinary skill in the art at the time the invention was made to dynamically filter the packets of Xie using domain and IP address rules, as taught in Balasubramanian, in order to control access to specific areas in web space as taught by Balasubramanian ([0016]).

Referring to claims 9-11, 14, 15, 23-25, 28, 29, 40, 43, Xie discloses that the packets are initially denied based on counter rules that increment the count until a threshold is exceeded (Col. 5, lines 10-15), which meets the limitation of constraints selected with a frequency exceeding a threshold and having no children with a frequency above the threshold. Xie discloses filtering packets using rules based on port number and IP address (Col. 5, lines 58-60), but does not specify filtering based on URLs and URL descendants. Balasubramanian discloses a rule based filtering system where URL requests are filtered at the domain and IP address level, based on rules, to allow/deny traffic for all domains beginning with identified IP address information ([0056] & [0065]-[0067]), which meets the limitation of the function is an aggregate of a number of occurrences with which the URL component was rejected by a rule and the number of occurrences with which descendants of the URL component were rejected by the rule. It would have been obvious to one of ordinary skill in the art at the time the invention was made to dynamically filter the packets of Xie using domain and IP address rules, as taught in Balasubramanian, in order to control access to specific areas in web space as taught by Balasubramanian ([0016]).

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN E. LANIER whose telephone number is (571)272-3805. The examiner can normally be reached on M-Th 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin E Lanier/  
Primary Examiner, Art Unit 2132